Review: Arc Lengths and Sectors Name _____ Date _____ Per __

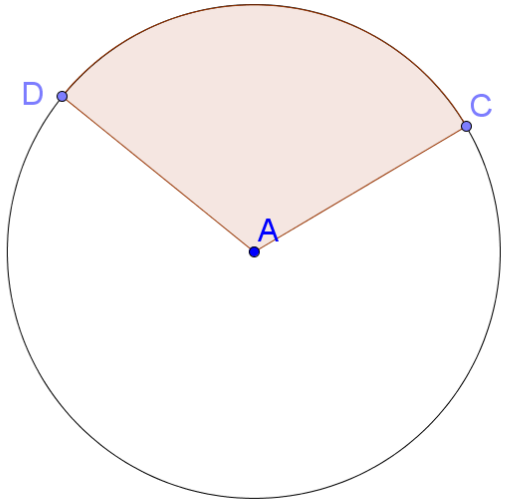
Arc Length:

Sector:

1. If m $\overset{\frown}{DC}$ = 115° and $\overline{DA}$ is 8 feet long.
   a. Determine the arc length of $\overset{\frown}{DC}$

   b. Determine the area of the shaded sector

   c. Determine the area of the unshaded sector

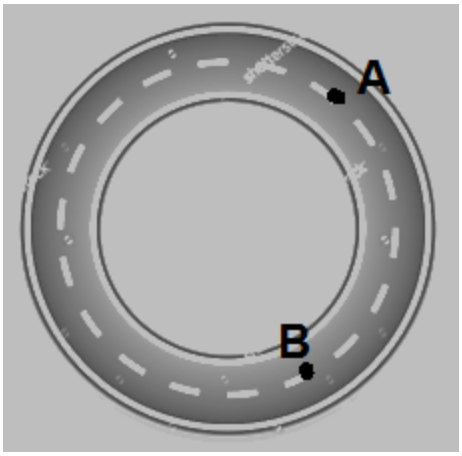


2. Crater Lake has a diameter of 6 miles

   a. To prevent tourists from falling into the water, the National Park Service has decided to put a fence around Crater Lake. How long should this fence be?

   b. Uku wants to run around the lake from point A to point B (the short way). If m $\overset{\frown}{AB}$ = 70°, how far must he run?

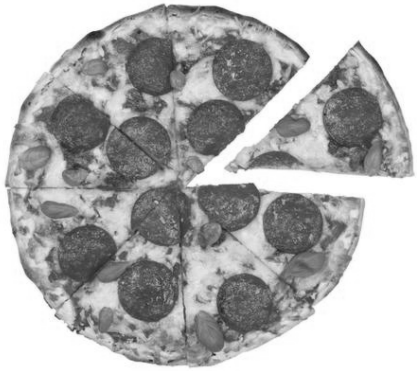
3. A circular track has a diameter of 160 yards, and m $\overset{\frown}{AB}$ = 100°



a. If a car drives a lap around the track, how far will the car travel?

b. If a car drives from point A to point B, how far will the car travel?

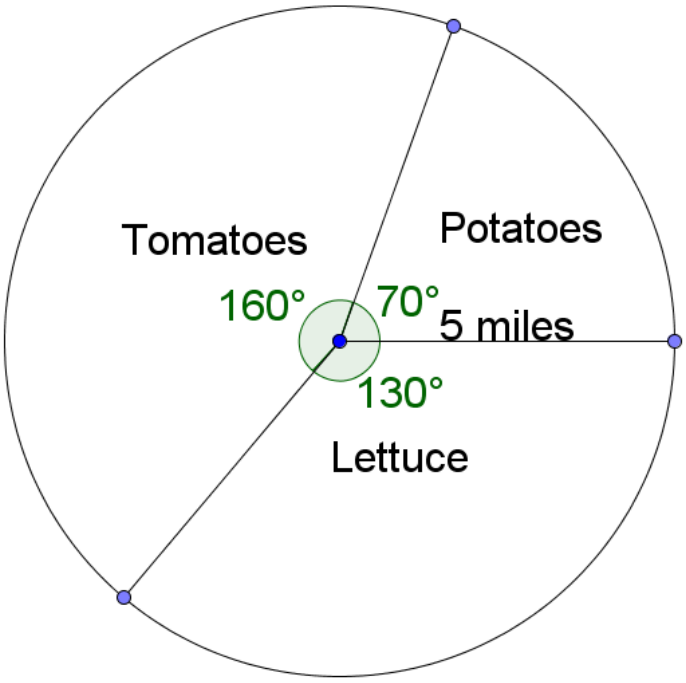
4. An extra large Me n Ed's pizza has a diameter of 16 inches



c. How much pizza is in a large Me n Ed's pizza?

d. If the tip of a slice of pizza has an angle of 45°, how much pizza is in one slice?

5. A farmer has a circular farm. The radius is 5 km, as shown.



   a. What is the area of tomatoes?

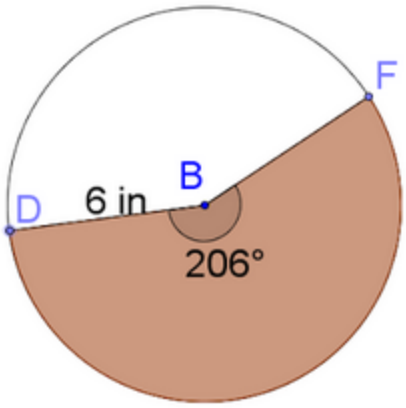
   b. What is the area of potatoes?

   c. If the tomatoes have a chain-link fence around the circumference, how long is the chain-link fence?

   d. If the potatoes and lettuce have a barbed wire fence around the circumference, how long is the barbed wire fence?

   e. If the tomatoes and lettuce have a brick wall where they meet, how long is the brick wall?

6. For the circle below



   a. Find the area of the circle

   b. Find the area of the larger sector

   c. Find the area of the smaller sector